

Report to Congressional Committees

January 2017

MILITARY PERSONNEL

DOD and the Coast Guard Need to Screen for Gambling Disorder Addiction and Update Guidance Highlights of GAO-17-114, a report to congressional committees

Why GAO Did This Study

The American Psychiatric
Association's 2013 edition of the
Diagnostic and Statistical Manual of
Mental Disorders defines gambling
disorder as persistent and recurrent
problematic gambling behavior leading
to clinically significant impairment or
distress.

Public Law 114-92 included a provision for GAO to review gambling among members of the armed forces. This report (1) describes what is known about the prevalence of gambling disorder among servicemembers in DOD and the CG; (2) assesses DOD's and the CG's approaches to screening, diagnosing, and treating servicemembers for gambling disorder; and (3) evaluates the extent to which DOD and CG guidance address gambling disorder in a manner similar to substance-use disorders. GAO analyzed DOD's most recent data related to gambling disorder prevalence (fiscal years 2011–2015) and DOD and CG policies.

What GAO Recommends

GAO makes eight recommendations, including that DOD incorporate gambling disorder questions in a systematic screening process and DOD and the CG update guidance to include gambling disorder. DOD concurred with five recommendations focused on updating guidance, but did not concur with incorporating gambling questions into a screening process due to the disorder's low prevalence. GAO maintains that this recommendation is still valid because, among other things, DOD's prevalence data are limited. The CG concurred with the two recommendations focused on updating guidance.

View GAO-17-114. For more information, contact Brenda S. Farrell at (202) 512-3604 or farrellb@gao.gov.

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DOD and the Coast Guard Need to Screen for Gambling Disorder Addiction and Update Guidance

What GAO Found

Department of Defense (DOD) data show 514 DOD and Coast Guard (CG) active-duty servicemembers and 72 Reserve Component servicemembers—less than 0.03 percent of the average number of servicemembers in each year—were diagnosed with gambling disorder or were seen for problem gambling in fiscal years 2011 through 2015 in the Military Health System (MHS). The MHS provides health services to beneficiaries across a range of care venues, such as military treatment facilities and civilian facilities through TRICARE. DOD bases this prevalence of gambling disorder and problem gambling on MHS data and does not include other sources of information, such as DOD-wide surveys and records of treatment provided outside of the MHS. The Defense Health Agency compiles these data in the MHS Data Repository, which includes data on clinical interactions between servicemembers and health-care professionals. The MHS Data Repository does not include data on DOD and CG servicemembers who received treatment or counseling for gambling disorder or problem gambling outside of the MHS.

DOD and the CG do not systematically screen for gambling disorder and, according to medical officials, both DOD and the CG use the 2013 Diagnostic and Statistical Manual of Mental Disorders criteria to diagnose servicemembers with gambling disorders, and they employ the same evidence-based treatments. Clinicians who GAO interviewed stated that financial counseling is also an important part of gambling disorder treatment. However, DOD's and CG's medical professionals do not incorporate medical screening questions specific to gambling disorder as they do for other similar medically determined addictive disorders, such as substance use. DOD officials stated they do not screen for gambling disorder because they focus on mental-health disorders that are high risk to overall readiness, high volume, and have validated measures for assessment. While gambling disorder is not a frequently diagnosed condition, the preoccupation with gambling, financial hardship, and increased risk of suicide can pose a risk to individual readiness. In addition, the Substance Abuse and Mental Health Services Administration has indicated that screening is important because few seek treatment directly for gambling disorder. Without proactively asking gambling disorder questions as part of screening to help detect gambling disorder, DOD and the CG risk not identifying affected servicemembers and providing treatment or counseling.

DOD and CG nonmedical personnel do not have clear guidance addressing gambling disorder. Neither DOD's nor CG's guidance for substance-use disorders explicitly includes gambling disorder. DOD health officials stated that their substance-use instruction "implicitly" covers gambling disorder; however, it refers only to problematic substance use. The Coast Guard has three documents that provide guidance and policy to both medical and nonmedical personnel on substance abuse, but these documents do not specifically discuss gambling disorder as an addiction. Without explicitly including gambling disorder in DOD and CG guidance on substance use, DOD and the CG may not being able to identify and provide appropriate treatment and counseling to DOD and CG servicemembers afflicted by gambling disorder and mitigate or prevent individual readiness issues.

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Abbreviations

DOD Department of Defense

OSD Office of the Secretary of Defense

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Congressional Committees

Gambling disorder is a complex addiction that frequently occurs with other behavioral health conditions and an increased likelihood of developing other conditions. Gambling disorder is also associated with poor physical health and financial or legal consequences. Like other addictions, gambling disorder can include depression, loss of control, and withdrawal, and without proper diagnosis and treatment can become more severe. The Department of Defense's (DOD) military services have slot machines at overseas military installations, for example in bowling alleys and clubs on base. Slot machines were removed from all domestic military installations after Congress passed a law in 1951 prohibiting gambling devices from being installed or used on any possession of the United States. However, some domestic military installations are located in close proximity to privately operated casinos. The Army manages most of the Navy's and all of the Marine Corps' slot machines overseas, and the Air Force manages the slot machines on its overseas installations.² Coast Guard installations do not have slot machines. In appendix I, we included a summary of the number and location of DOD slot machines and the total revenue generated from these slot machines in fiscal years 2011 through 2015.

In 2013, the American Psychiatric Association identified gambling as an addiction similar to substance-use disorders, such as those associated with alcohol and drugs. This change in categorization is reflected in the most recent edition of the *Diagnostic and Statistical Manual of Mental*

¹Pub. L. No. 81-906 (1951), *codified as amended at* 15 U.S.C. § 1175. Section 1175(a) of title 15 of the United States Code states that it shall be unlawful to manufacture, recondition, repair, sell, transport, possess or use any gambling device in the District of Columbia, in any possession of the United States, within Indian country as defined in section 1151 of title 18 or within the special maritime and territorial jurisdiction of the United States as defined in section 7 of title 18.

²Currently the Navy operates its own slot machines on one installation. Memorandum of Agreement between The U.S. Army Installation Management Command (IMCOM) and the U.S. Navy, Commander Navy Installations Command (CNIC), *Placement and Operation of Gaming Machines on Navy Installations* (June 4, 2015); Memorandum of Agreement between the U.S. Army Installation Management Command G9 and Headquarters, U.S. Marine Corps, NAF Business and Support Services Division, *Placement and Operation of Gaming Machines in Marine Corps Community Services (MCCS) Activities in Japan* (Sept. 5, 2014).

Disorders, Fifth Edition—the primary source used by civilian and military mental-health-care providers to diagnose mental disorders.³ This edition defines "gambling disorder" as a preoccupation with gambling and a loss of control, associated with a higher risk of suicide attempts, substance-use disorders, and other mental-health conditions, in addition to being associated with financial and legal problems.⁴

Section 731 of the National Defense Authorization Act for Fiscal Year 2016 included a provision for us to conduct a study on gambling among members of the armed forces. This report (1) describes what is known about the prevalence of gambling disorder among servicemembers in DOD and the Coast Guard; (2) assesses DOD's and the Coast Guard's approaches to screening, diagnosing, and treating servicemembers for gambling disorder; and (3) evaluates the extent to which DOD and Coast Guard guidance address gambling disorder in a manner similar to substance-use disorders.

For the first objective, we analyzed the most-recent complete data from the Military Health System Data Repository, which the Defense Health Agency oversees, on the number of servicemembers who were seen by the Military Health System for problem gambling and gambling disorder in fiscal years 2011–2015. We found these data to be sufficiently reliable to show how many servicemembers were seen by the Military Health System for problem gambling and gambling disorder during this period by

³American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed. (Arlington, VA: 2013).

⁴In this report, our use of the term "gambling disorder"—as described in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*—also encompasses pathological gambling as described in the fourth edition of that manual. In this report, we also use the term "problem gambling," which the Substance Abuse and Mental Health Services Administration—part of the Department of Health and Human Services—defines as harmful gambling activity without a dependence on the gambling. The International Statistical Classification of Diseases and Related Health Problems categorizes problem gambling as a lifestyle problem in the absence of a disease or other external cause.

⁵Pub. L. No. 114-92, § 731 (2015). Section 731 required GAO to assess the prevalence and particular risks of problem gambling among members of the armed forces. In an effort to assess those risks, we conducted a literature review of reports and studies regarding any causal relationship between developing problem gambling and the availability of gambling. However, we did not find any studies specific to the armed forces and therefore cannot report on any possible link. The term "armed forces" refers to the Army, the Marine Corps, the Navy, the Air Force, and the U.S. Coast Guard. The Coast Guard is a military service within the Department of Homeland Security when not operating as a service in the Navy.

reviewing database documentation and interviewing agency officials responsible for maintaining the database. In addition, we reviewed DOD's most-recent Health Related Behavior Surveys that asked respondents about gambling behaviors—conducted in 2002 and 2003 for the active-duty component and in 2010 and 2011 for the Reserve and National Guard—to identify what is known about the prevalence of problematic gambling behaviors among servicemembers.⁶

We also conducted two separate literature searches regarding the prevalence of gambling disorder in the general population as well as the military population. The first prevalence search focused on the active-duty and reserve U.S. military population, including the Coast Guard, in English-language professional journals, government reports, and other published and unpublished papers issued between 2001 and 2016; from this search, we identified three studies. The second prevalence review focused on the adult U.S. general population in English-language professional journals, government reports, and other published and unpublished papers published with data collected in 2006 or later; from this search, we identified one study.

For the second objective, we compared DOD and Coast Guard policies for screening, diagnosing, and treating DOD and Coast Guard servicemembers with gambling disorders with the authoritative source for civilian and military mental health professionals for diagnosing patients with gambling disorder—the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition. We reviewed screening tools, such as DOD's Periodic Health Assessment, to identify whether they contained gambling-disorder screening questions. We also reviewed the American Society of Addiction Medicine treatment criteria for addictive conditions, which assess the appropriate treatment venue for each patient based on a multidimensional assessment; these criteria were designed to define one national set of criteria for providing outcome-oriented and results-based care in the treatment of addiction.⁷

⁶Department of Defense, 2002 Department of Defense Survey of Health Related Behaviors Among Military Personnel, RTI International (Research Triangle Park, NC: October 2003); Department of Defense, Defense Lifestyle Assessment Program (DLAP), 2010-2011 Department of Defense Health Related Behaviors Reserve Component Survey (Research Triangle Park, NC: July 2012). The Coast Guard was not included in either of these iterations of the survey.

⁷American Society of Addiction Medicine, *The ASAM Criteria: Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions, 3rd ed.* (Chevy Chase, MD: 2013).

We also reviewed financial counseling services available for servicemembers and their dependents to address problem gambling.

For the third objective, we compared DOD's and the Coast Guard's respective policies on substance use against GAO's Standards for Internal Control in the Federal Government. According to Standards for Internal Control in the Federal Government, management must communicate high-quality information internally to enable personnel to perform key roles in achieving objectives, addressing risks, and supporting the internal control system. 8 We also reviewed DOD (including service-level) and Coast Guard guidance pertaining to the screening, diagnosis, and treatment of gambling disorder. For all the objectives, we interviewed Defense Health Agency officials as well as DOD and Coast Guard service medical officials to corroborate our understanding of DOD and Coast Guard policies on problem gambling and gambling disorder. We conducted site visits to a nongeneralizable sample of Army, Navy, Air Force, and Coast Guard military treatment facilities in California that had reported at least one diagnosed case of gambling disorder, and we conducted telephone interviews with behavioral health officials at military treatment facilities in Japan and the Republic of Korea. 9 A more-detailed discussion of our scope and methodology is provided in appendix II.

We conducted this performance audit from December 2015 to January 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

⁸GAO, Standards for Internal Control in the Federal Government, GAO/AIMD-00-21.3.1 (Washington, D.C.: Nov. 1999). These standards were in effect prior to fiscal year 2016 and cover the time period of DOD's data. The standards were subsequently updated. The updated standards went into effect on October 1, 2015. See GAO, Standards for Internal Control in the Federal Government, GAO-14-704G (Washington, D.C.: Sept. 10, 2014).

⁹We interviewed officials from military treatment facilities at installations in California including Fort Irwin, Camp Pendleton, Los Angeles Air Force Base, and Coast Guard Station Los Angeles/Long Beach. We interviewed mental-health-care providers at Camp Zama, Japan; U.S. Naval Hospital, Camp Foster, Japan; Marine Corps Air Station Futenma, Japan; and Yongsan Garrison, Republic of Korea.

Background

Governance and Structure of the Military Health System

DOD established the Defense Health Agency on October 1, 2013, to provide administrative support for the services' respective medical programs, combine common "shared" services, and coordinate the work of the services' military treatment facilities with care purchased from the private sector. ¹⁰ The Defense Health Agency supports the delivery of services to Military Health System beneficiaries and is responsible for integrating clinical and business processes across the Military Health System.

The Military Health System, which serves all of the military services including the Coast Guard, has two missions: (1) supporting wartime and other deployments and (2) providing peacetime health care. The Military Health System is a complex organization that provides health services to almost 10 million DOD and Coast Guard servicemembers and their dependents across a range of care venues, including the battlefield, traditional hospitals and clinics at stationary locations, and authorized civilian providers. The Military Health System employs more than 150,000 military, civilian, and contract personnel working in military treatment facilities. In the Military Health System, care is provided through TRICARE, DOD's regionally structured health-care system. Under TRICARE, DOD and Coast Guard active-duty servicemembers typically receive most of their care in what is known as the direct-care component—that is, in military hospitals and clinics referred to as military treatment facilities. The care provided in military treatment facilities is supplemented by services offered through TRICARE's purchased-care networks of civilian providers. The Defense Health Agency oversees the TRICARE health plan and military treatment facilities and subordinate clinics, but does not have direct command and control of the military services' military treatment facilities outside of the National Capital Region. Each military service, including the Coast Guard, operates its own military treatment facilities and their subordinate clinics. In addition, the military services, including the Coast Guard, administer medical

¹⁰According to DOD, a "shared services concept" is a combination of common services performed across the medical community, such as Medical Logistics, Facility Planning, Medical Education and Training, Health Information Technology, and Medical Research, Development, and Acquisition. For more information on the implementation of the Defense Health Agency, see GAO, *Defense Health Care Reform: Actions Needed to Help Ensure Defense Health Agency Maintains Implementation Progress*, GAO-15-759 (Washington, D.C.: Sept. 10, 2015).

programs and provide medical and mental-health services to servicemembers. Military medical personnel providing mental-health services include psychiatrists, psychologists, mental-health nurse practitioners, licensed social workers, and alcohol and drug counselors. Although it is part of the Military Health System, the Coast Guard has adopted some, but not all, of DOD's health-related guidance.

According to DOD officials, the Navy, the Marine Corps, and the Air Force provide nonmedical education and counseling services for individuals with problem gambling who do not meet the criteria for gambling disorder diagnosis. These educational and supportive services are provided through the Fleet and Family Service Centers, the Marine Corps Community Services Behavioral Health Clinics, and the Airman and Family Readiness Centers, respectively, as well as through the Military OneSource program—a program that provides confidential, short-term, nonmedical counseling services and information both face-to-face and remotely. 11 Coast Guard servicemembers can receive counseling services through CG SUPRT, a confidential program similar to Military OneSource. 12 Army officials told us that gambling disorder is not currently addressed within the Army Substance Abuse Program and that Army regulation does not require the program to cover gambling disorder. 13 In addition, service chaplains offer nonmedical counseling services for DOD and Coast Guard servicemembers. DOD officials stated that individuals with a diagnosable gambling disorder would be referred to a military treatment facility.

Behavioral Health Definitions Regarding Gambling

The *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition, defines gambling disorder as the "persistent and recurrent problematic gambling behavior leading to clinically significant impairment or distress." The term gambling disorder replaced pathological gambling as the gambling-related diagnosis in the most recent (2013) edition of the *Diagnostic and Statistical Manual of Mental Disorders*. The primary

¹¹Military OneSource is a DOD-funded program available to all DOD servicemembers (including those in the Reserve Component) and their families. The program also provides information and resources on deployments, parenting, and relationships, among other things.

¹²The CG SUPRT Program is accessible via a phone number that corresponds with the name of the program. It is available for active-duty and reserve Coast Guard members, civilian employees, and all of their dependents.

¹³Army Regulation 600-85, *The Army Substance Abuse Program* (Dec. 28, 2012).

difference between the two diagnostic terms is that pathological gambling was considered an impulse-control disorder whereas gambling disorder is in the diagnostic category of substance-related and addictive disorders.¹⁴ Table 1 presents the diagnostic criteria in the fourth and fifth editions of the Diagnostic and Statistical Manual of Mental Disorders.

Table 1: Comparison of Diagnostic Criteria for Pathological Gambling and Gambling Disorder, 2000 and 2013

Pathological gambling Gambling disorder Diagnostic and Statistical Manual of Mental Disorders, Fourth Diagnostic and Statistical Manual of Mental Disorders, Fifth **Edition, Text Revision (2000) Edition (2013)**

A. Persistent and recurrent maladaptive gambling behavior as indicated by at least five of the following:

- Is preoccupied with gambling (e.g., preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble).
- Needs to gamble with increasing amounts of money in order to achieve the desired excitement.
- Has repeated unsuccessful efforts to control, cut back, or stop gambling.
- Is restless or irritable when attempting to cut down or stop gambling.
- Gambles as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression).
- After losing money gambling, often returns another day in order to get even ("chasing" one's losses).
- Lies to family members, therapist, or others to conceal the extent of involvement with gambling.
- Has committed illegal acts, such as forgery, fraud, theft, or embezzlement, in order to finance gambling.
- Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling.
- 10. Relies on others to provide money to relieve a desperate financial situation caused by gambling.

A. Persistent and recurrent problematic gambling behavior leading to clinically significant impairment or distress, as indicated by the individual exhibiting four (or more) of the following in a 12-month period:

- Needs to gamble with increasing amounts of money in order 1. to achieve the desired excitement.
- Is restless or irritable when attempting to cut down or stop gambling.
- Has made repeated unsuccessful efforts to control, cut back, or stop gambling.
- Is often preoccupied with gambling (e.g., having persistent thoughts of reliving past gambling experiences, handicapping or planning the next venture, thinking of ways to get money with which to gamble).
- Often gambles when feeling distressed (e.g., helpless, guilty, anxious, depressed).
- After losing money gambling, often returns another day to get even ("chasing" one's losses).
- Lies to conceal the extent of involvement with gambling. 7.
- Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling.
- Relies on others to provide money to relieve desperate financial situations caused by gambling.
- B. The gambling behavior is not better explained by a manic episode.

¹⁴The differences between the two diagnostic terms are threefold. First, in the previous (i.e., fourth) edition, pathological gambling was classified as an impulse-control disorder, whereas in the most-recent edition, gambling disorder is classified under substancerelated and addictive disorders. Second, for a diagnosis of pathological gambling under the previous edition, the patient would have to exhibit 5 out of the 10 diagnostic criteria. For a diagnosis of gambling disorder under the current edition, the patient must exhibit 4 of the 9 diagnostic criteria. Third, the diagnostic criteria in the previous edition refer to lifetime gambling behaviors, whereas the current edition's diagnostic criteria refer to gambling behaviors exhibited in the past 12 months.

Pathological gambling

Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (2000)

Gambling disorder

Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (2013)

B. The gambling behavior is not better accounted for by a manic episode.

Source: American Psychiatric Association. | GAO-17-114

In addition, the American Society of Addiction Medicine published criteria that evaluate the appropriate venue for an individual to be treated based on a multidimensional assessment and that are designed to define one national set of criteria for providing outcome-oriented and results-based care in the treatment of addiction. 15 According to the American Society of Addiction Medicine, addiction—which it defines as "pathologically pursuing reward and/or relief by substance use and other behaviors" can be associated with various substances and behaviors, such as alcohol and gambling. In explaining its decision to recategorize gambling disorder as an addiction in the 2013 revision of the Diagnostic and Statistical Manual of Mental Disorders, the American Psychiatric Association observed that gambling disorder and substance-related disorders display commonalities in symptoms as well as treatment. In addition, the Diagnostic and Statistical Manual of Mental Disorders states that individuals with gambling disorder have high rates of other mental disorders, such as substance-use disorders, depressive disorders, anxiety disorders, and personality disorders. Table 2 presents the similarities and differences between substance use and gambling disorder.

Table 2: Similarities and Differences between Substance Use and Gambling Disorder

Similarities Differences A state of euphoria resulting from engagement in the No objective tests to determine problem gambling in contrast behavior. Thus, the behavior—at least early in the course of to laboratory tests that can detect the presence of alcohol or the chronic condition—is pleasurable (engagement in the other drugs (though not the presence of the condition of behavior for purposes of reward) addiction) Preoccupation when engaging in the activity Problem gambling can be easier to hide from others Loss of control at times when engaging in the behavior Overuse of alcohol or other drugs can be self-limiting, that is, if there is physical or mental "shut down" as when an Progression of problems and symptoms over time individual passes out; gambling is not self-limiting in the Stage of change, readiness to change, and interest in sense that a physical or mental state "shuts down" the changing issues, usually manifesting as diminished

¹⁵American Society of Addiction Medicine, *The ASAM Criteria: Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions*, 3rd ed. (Chevy Chase, MD: 2013).

Similarities

recognition of problems associated with addictive behavior

- The behavior is continued in spite of adverse consequences
- Tolerance develops with repeated engagement in the behavior
- Urges and cravings develop regarding further engagement in the behavior
- There is enhanced cue responsiveness, which can trigger relapse to the behavior
- Withdrawal symptoms occur when the activity is unavailable
- Psychological drives of escape, self-medication, and avoidance exist (engagement in the behavior for purposes of relief)
- Committing illegal acts to fund ongoing engagement with the behavior (substance use or gambling) can be episodic, chronic, or in remission

Differences

gambling behavior

- Suicide rates are higher among problem gamblers (20 percent attempted)
- Problem gamblers' financial situation is often more critical and must be addressed
- Less public awareness and acceptance of gambling disorder
- Fewer treatment resources (treatment programs, certified gambling counselors, support groups)
- More-restricted third-party reimbursement for treatment of gambling disorders

Source: American Society of Addiction Medicine. | GAO-17-114

Note: Use of substances and engagement in different forms of gambling can have different "addictive potential" associated with the schedule of reinforcement of the behavior (gambling is most "addictive" when there is a variable schedule of reinforcement), and associated with the time of onset of the reward or relief after engagement in the behavior (e.g., the immediacy of physiological effect after intravenous drug use or after initiation of video poker play). This may result in different rates of addiction progression.

DOD and the Coast Guard Determined That the Prevalence of Gambling Disorder Is Low, Based on Military Health System Data

DOD and the Coast Guard Determined That the Prevalence of Problem Gambling and Gambling Disorder Is Low, Based on Servicemembers' Use of the Military Health System

Based on DOD data that show 514 DOD and Coast Guard active-duty servicemembers and 72 Reserve Component servicemembers—less than 0.03 percent of the average number of servicemembers in each year—were diagnosed with gambling disorder or seen for problem gambling in fiscal years 2011 through 2015, DOD officials stated that the prevalence of gambling disorder in the military is low. DOD bases its determination of prevalence of gambling disorder and problem gambling on Military Health System data and does not include other sources of information, such as DOD-wide surveys and records of treatment

provided outside of the Military Health System. The active-duty components of the DOD military services and the Coast Guard averaged about 1.4 million servicemembers each year, and the Reserve Component averaged about 0.8 million servicemembers each year. ¹⁶ Table 3 shows the number of DOD and Coast Guard servicemembers who were seen through the Military Health System for pathological gambling, gambling disorder, and problem gambling during fiscal years 2011 through 2015.

Table 3: Number of DOD and Coast Guard Servicemembers Who Were Seen by the Military Health System for Pathological Gambling, Gambling Disorder, and Problem Gambling (Fiscal Years 2011 through 2015)

Fiscal year	Active-duty component				Reserve Component							
	Air Force	Army	Coast Guard	Marine Corps	Navy	Total	Air Force Reserve and Air National Guard	Army Reserve and Army National Guard	Marine Corps Reserve	Navy Reserve	Coast Guard Reserve	Total
2011	26	63	3	19	26	137	1	18	0	1	2	22
2012	21	53	4	22	19	119	3	15	0	0	2	20
2013	32	44	2	18	25	121	3	14	0	0	1	18
2014	31	55	0	10	32	128	1	15	0	0	1	17
2015	30	54	0	19	28	131	1	11	1	1	4	18
Total	112	215	7	73	107	514	5	55	1	2	9	72

Source: DOD Military Health System Data Repository | GAO-17-114

Notes: These data include servicemembers—from both the Department of Defense (DOD) and the Coast Guard, including the Reserve Component—who were seen by the Military Health System for pathological gambling (the diagnostic category for the prior version of the *Diagnostic and Statistical Manual of Mental Disorders*) and gambling disorder (the current manual's diagnostic category) as well as problem gambling; a servicemember with problem gambling was seen through the Military Health System for gambling behavior, but he or she met fewer than the requisite number of diagnostic criteria for a formal diagnosis. Total lines reflect the unique number of DOD and Coast Guard servicemembers to receive a gambling diagnosis. Because some servicemembers were seen for gambling disorder, pathological gambling, or problem gambling in multiple years, the total may be less than the sum of the individual years.

The Defense Health Agency compiles these problem gambling and gambling disorder data in the Military Health System Data Repository,

¹⁶The Military Health System provides health care at no cost to active-duty DOD and Coast Guard servicemembers; reservists called or ordered to active service for more than 30 days have the same coverage as active-duty servicemembers under TRICARE Prime; inactive reservists may qualify to purchase TRICARE Reserve Select, which has similar coverage to TRICARE Prime. As such, reservists activated for more than 30 days or who elected to purchase TRICARE Reserve Select are eligible to be seen for problem gambling or gambling disorder within the Military Health System.

which includes data on clinical interactions between DOD and Coast Guard servicemembers and health-care professionals in military treatment facilities and in civilian facilities through the TRICARE system, and DOD health officials told us that they use these data to determine the prevalence of gambling disorder. The prevalence of alcohol-related disorders is higher by comparison, according to data from the Military Health System Data Repository. For example, in fiscal years 2011 through 2015, 107,702 DOD and Coast Guard active-duty servicemembers and 10,896 Reserve Component servicemembers were seen through the Military Health System for alcohol-related disorders.¹⁷

The Military Health System Data Repository does not include data on DOD and Coast Guard servicemembers who received treatment or counseling for gambling disorder or problem gambling outside of the Military Health System. For example, Marine Corps officials stated that Marines may receive short-term, nonmedical counseling at Marine Corps Community Services Behavioral Health Substance Abuse Counseling Centers, and these interactions will be reflected in the Military Health System Data Repository only when the patient also visits a military treatment facility for this issue. Additionally, the Military Health System Data Repository does not capture data regarding treatment received by servicemembers of the Reserve Component unless they are on active orders for more than 30 days, need treatment for a line-of-duty injury or condition, or enrolled in TRICARE Reserve Select. According to DOD officials, Reserve Component medical personnel also are unlikely to learn about an individual's gambling problem because of the short periods that nonactivated members of the Reserve Component spend in uniform, which limits the ability of the medical personnel to refer them for treatment and counseling. DOD officials also told us that servicemembers who call Military OneSource—a telephonic resource for servicemembers—for referrals for gambling problems may be referred to a military treatment facility or a TRICARE provider, but they also may be referred to local, civilian treatment programs or support groups. For example, servicemembers may seek treatment through state programs or from a

¹⁷Alcohol-related disorders are defined and categorized based on the International Statistical Classification of Diseases and Related Health Problems, Ninth Revision, which DOD employed during the period covered by our review.

nearby Gamblers Anonymous chapter.¹⁸ DOD officials told us that they do not collect data on the number of servicemembers who call Military OneSource for problem gambling or gambling disorder, nor do they collect data on gambling-related referrals.

Problem Gambling and Gambling Disorder Prevalence Data from Other Sources Provide Contextual Information, but Are Not Directly Comparable to Military Health System Data

DOD surveys of servicemembers, data on medical care provided by the Department of Veterans Affairs, and reviews of literature provide contextual information on the prevalence of problem gambling and gambling disorder in the military, but these data are not directly comparable to DOD clinical data. DOD's 2002 Health Related Behaviors Survey of the DOD active-duty population and the 2010–2011 survey of the DOD Reserve Component populations asked respondents about their problematic gambling behaviors, but the results of these surveys are not directly comparable to the DOD data, as shown in table 3.19 An estimated 1.2 percent (with a standard error of 0.2 percent) of active-duty military personnel met the Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition, criteria for lifetime prevalence of probable pathological gambling based on the self-administered survey of health-related behaviors. Similarly, an estimated 1.3 percent (with a standard error of 0.1 percent) of Reserve Component respondents to the 2010–2011 DOD Health Related Behaviors Reserve Component Survey met the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.

¹⁸For example, the state of California provides free treatment, including counseling services, for individuals adversely affected by a gambling disorder. Another resource is Gamblers Anonymous, a support group for individuals who want to address their gambling problems. According to one Navy chaplain, an aircraft carrier on which he had served had an active chapter of Gamblers Anonymous.

¹⁹The 2002 and 2010–2011 surveys asked respondents about the following 10 items, which correspond to the diagnostic criteria for pathological gambling in *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition: preoccupation with gambling; a need to gamble with increasing amounts of money to achieve the desired level of excitement; repeated, unsuccessful attempts to control, cut back on, or stop gambling; restlessness or irritability when unable to gamble; gambling as a way of escaping from problems; gambling losses, often followed by attempts to return another day to get even ("chasing" one's money); lying to family members or others about the extent of one's gambling; commission of illegal acts, such as forgery, fraud, or theft, to finance gambling; jeopardizing or losing relationship, job, educational, or career opportunities because of gambling; and relying on others to provide money to relieve a desperate financial situation caused by gambling. The Coast Guard was not included in either of these iterations of the survey.

criteria for lifetime prevalence of probable pathological gambling.²⁰ These survey data are not comparable to DOD data presented in table 3 for three reasons. First, the surveys were based on the Diagnostic and Statistical Manual of Mental Disorders criteria that were applicable at the time of the surveys, which, as discussed above, differed from the current version in the disorder's categorization and the number of diagnostic criteria.21 Second, the surveys were based on anonymous selfadministered questionnaires, while gambling disorder and problem gambling clinical data were based on clinicians' interactions with servicemembers. Third, the estimate of lifetime prevalence does not indicate current prevalence. Further, according to the most-recent edition of the Diagnostic and Statistical Manual of Mental Disorders, a majority of individuals with gambling disorder do not seek out treatment, which implies that servicemembers may report problematic gambling behaviors on an anonymous survey but not seek treatment. DOD stated that since 2002 more-recent versions of the active-duty Health Related Behavior Survey, which occurs approximately every 3 years, have not asked about gambling behaviors because previous iterations of the survey in 1992 and 1998 showed similar low rates of gambling behaviors for the active-duty force, and DOD officials stated that they had sought to shorten the length of the survey. 22 However, the Health Related Behavior Surveys have regularly included at least one question regarding financial difficulties, which may indicate a gambling problem.

The Department of Veterans Affairs also collects data on the number of former servicemembers who visit the Veterans Health Administration for treatment for problem gambling or gambling disorder. However, Veterans Health Administration officials stated that they do not have data on how many individuals developed gambling problems during their military

²⁰The 2010–2011 DOD Health Related Behaviors Reserve Component Survey was released within the department only and was not publicly released by DOD because DOD determined there were critical deficiencies in the draft report, which was prepared by an outside contractor. According to DOD, the draft lacked multicomparison statistics, failed to account for updated national health goal targets, and neglected to include a sufficiently up-to-date and comprehensive review of the literature. However, these deficiencies should not affect the validity of the prevalence estimates.

²¹American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed., Text Revision, (Washington, DC: 2000).

²²Department of Defense, 2005 Department of Defense Survey of Health Related Behaviors Among Active Duty Military Personnel: A Component of the Defense Lifestyle Assessment Program (DLAP), RTI International (Research Triangle Park, NC: December 2006).

service. Data from the Veterans Health Administration showed that 10,012 veterans were seen for problem gambling or gambling disorder through the Veterans Health Administration in fiscal years 2011 through 2015. On average, 8.9 million veterans were enrolled in the Veterans Affairs health-care system each year. However, Department of Veterans Affairs officials stated that they do not systematically collect information on which facilities provide services for treating gambling disorder, and that there is not a required screening program for veterans with problem gambling or gambling disorder.

In addition, we conducted two reviews of literature on the prevalence of problem gambling and gambling disorder: one on the U.S. general adult population and one on the U.S. military population. For the U.S. general population review, we identified only one report within our scope; that study estimated the prevalence of past-year problem gambling to be 4.6 or 5.0 percent of the population and the prevalence of past-year pathological gambling to be 2.4 or 1.0 percent of the population (using the South Oaks Gambling Screen-Revised and the Diagnostic Interview Schedule-IV instruments, respectively). 23 This study is not directly comparable to Military Health System data because it analyzed the results of phone-based surveys of the U.S. general population; on the other hand, Military Health System data are based on clinical interactions of the U.S. military population. In a separate literature search on the prevalence of problem gambling and gambling disorder in the U.S. military, three of the four results were the previously discussed DOD Health Related Behavior Surveys. The fourth result was a small. nonrepresentative, 6-month self-report questionnaire study of incoming patients at a Navy outpatient psychiatric clinic that indicated 1.9 percent of 360 military personnel were diagnosed with a lifetime prevalence of pathological gambling using the South Oaks Gambling Screen.²⁴ However, this is the prevalence among those patients voluntarily presenting to a psychiatric clinic who agreed to complete the

²³The South Oaks Gambling Screen and its revised version and the gambling module of the Diagnostic Interview Schedule-IV are screening questionnaires designed to identify individuals at risk of gambling disorder. If they are identified, the next step is to perform a diagnostic assessment using the *Diagnostic and Statistical Manual of Mental Disorders*. This study did not provide standard errors or confidence intervals. John W. Welte et al., "Gambling and Problem Gambling in the United States: Changes between 1999 and 2013," *Journal of Gambling Studies* 31, no. 3 (2015): 695–715.

²⁴Neither standard deviations nor confidence intervals were reported. D. R. Weis and G. H. Manos, "Prevalence and epidemiology of pathological gambling at naval medical center Portsmouth psychiatry clinic," *Military Medicine* 172 (July 2007): 782–786.

questionnaire and is not a valid indicator of prevalence among all clinic patients, the base population, the military service, or the military as a whole.

DOD and the Coast
Guard Do Not
Systematically
Screen for Gambling
Disorder, but DOD
and Coast Guard
Medical Personnel
State That They
Address Gambling
Disorder in Line with
Current Medical
Practices

DOD and the Coast Guard Do Not Systematically Screen for Gambling Disorder

DOD and the Coast Guard do not systematically screen for gambling disorder through DOD's annual health assessment or any other type of periodic health screening of servicemembers. DOD Instruction 6025.19, *Individual Medical Readiness*, which is applicable to the military services, including the Coast Guard, requires military departments to screen servicemembers for physical and mental health conditions using an annual screening tool called the Periodic Health Assessment.²⁵ DOD and the Coast Guard use the annual Periodic Health Assessment to assess each servicemember's overall health and medical readiness and to initiate preventive services, as warranted. The Periodic Health Assessment assesses health conditions that may limit or prevent a servicemember from deploying, and the behavioral-health section asks specific questions on prescription drugs, alcohol consumption, and post-traumatic stress. However, there are no questions on the assessment that

²⁵Department of Defense Instruction 6025.19, *Individual Medical Readiness (IMR)* (June 9, 2014). The Under Secretary of Defense for Personnel and Readiness is responsible for establishing policy on the administration of the IMR Program.

explicitly mention gambling that would allow for medical personnel to screen for gambling disorder—an addictive disorder medically similar to substance abuse, as previously discussed. Furthermore, DOD Instruction 6490.07, *Deployment-Limiting Medical Conditions for Service Members and DoD Civilian Employees*, which a 2013 DOD memorandum supplements, describes mental-health conditions that would limit or prevent personnel from deploying. These conditions may include, but are not limited to, individuals with substance-use disorders undergoing active treatment as well as those at risk for suicide.²⁶

As part of the Department of Health and Human Services, the Substance Abuse and Mental Health Services Administration aims to reduce the effect of substance abuse and mental illness and to focus the nation's public-health agenda on these issues as well as addiction. They provide some examples for screening-question sets that are used to identify potential gambling disorders in the general population by health-care personnel that could be used on the DOD Periodic Health Assessment. One example is the South Oaks Gambling Screen that consists of questions in categories such as frequency of gambling, type of gambling, and patient perceptions. Another screening example is the "Lie/Bet" screening which requires just two questions:

- 1. Have you ever had to lie to people important to you about how much you gambled?
- 2. Have you ever felt the need to bet more and more money?

DOD and Coast Guard officials stated that they do not screen for gambling disorder because they focus military health surveillance on mental-health disorders that are high risk to overall readiness, high volume, and have validated measures for assessment. However, while gambling disorder is a comparatively low-volume disorder, the preoccupation with gambling, financial hardship, and increased risk of suicide can pose a risk to individual readiness and has been identified in the recent *Diagnostic and Statistical Manual of Mental Disorders* as sharing similar symptoms and treatment methods with substance-use disorders. According to DOD Instruction 6490.07, individuals with clinical psychiatric disorders with residual symptoms that impair duty

²⁶These conditions are cited in a memorandum from the Assistant Secretary of Defense for Health Affairs that supplements DOD Instruction 6490.07. Assistant Secretary of Defense for Health Affairs Memorandum, *Clinical Practice Guidance for Deployment-Limiting Mental Disorders and Psychotropic Medications* (Oct. 7, 2013).

performance are precluded from contingency deployment unless a waiver is granted. In addition, a 2013 Assistant Secretary of Defense for Health Affairs memorandum that supplements this instruction also states that individuals with mental disorders should demonstrate a pattern of stability without significant symptoms or impairment for at least 3 months prior to deployment, unless a waiver is granted.²⁷ It also states that servicemembers diagnosed with substance-use disorders should not deploy if doing so would interrupt active treatment. Therefore, for servicemembers with gambling disorder, it may be difficult to maintain individual deployment readiness and perform duties effectively. For example, according to the 2013 Diagnostic and Statistical Manual of Mental Disorders, gambling disorder is a risk factor for suicide attempts, with roughly 17 percent of those in treatment attempting suicide at some point. In addition, data from the DOD Suicide Event Report show there were 8 suicides and 13 suicide attempts related to gambling behavior by servicemembers in fiscal years 2011–2015.²⁸

Additionally, gambling disorder is difficult to detect because there are no objective laboratory tests, such as urinalysis for substance use, to identify individuals with potential gambling disorder, according to the American Society of Addiction Medicine. For this reason, screening is even more important to identifying servicemembers that may need assistance. In addition, military servicemembers may also be reluctant to seek mental-

²⁷However, any current diagnosis or history of a diagnosis of a psychotic or bipolar disorder, or other disorder with associated psychotic symptoms, is considered disqualifying for deployment and these conditions are not eligible for a waiver. Assistant Secretary of Defense for Health Affairs Memorandum, *Clinical Practice Guidance for Deployment-Limiting Mental Disorders and Psychotropic Medications*, para. (Oct. 7, 2013).

²⁸At our request, DOD conducted a search of its Suicide Event Report using the following search terms: gamble, debt, bookie, casino, roulette, cards, poker. We found these numbers to be underestimates of the number of suicides and attempted suicides due to the way the data are collected. For example, data is not collected on reserve component servicemembers who are not in an active duty status. The magnitude of the underestimation is unknown. This search identified 135 cases that were then reviewed to ensure that the identified content was indicative of monetary gambling (i.e., to ensure that "debt" referenced gambling debts and not other sources of debt (e.g., credit card, child support). Death-risk gambling (e.g., Russian Roulette) was excluded in this analysis. The results of this coding identified 8 suicides and 13 suicide attempts between fiscal years 2011 and 2015 where the behavioral health professional completing the DOD Suicide Event Report indicated a gambling behavior as a relevant antecedent factor. DOD stated the occurrence of gambling behavior should not be interpreted as being causally related to the occurrence of the suicide behavior.

health treatment because of perceived stigma. ²⁹ According to the 2013 *Diagnostic and Statistical Manual of Mental Disorders*, less than 10 percent of individuals with gambling disorder seek treatment. Similarly, the Substance Abuse and Mental Health Services Administration has indicated that screening is important because few seek treatment directly for gambling disorder, and they instead seek treatment for other problems such as depression. Gambling disorder can also be easier to hide than other addictions, according to the American Society of Addiction Medicine. Without proactively asking gambling disorder questions as part of screening to help detect gambling disorder, DOD and the Coast Guard risk not identifying affected servicemembers and providing assistance for the disorder. When coupled with higher suicide rates, high rate of co-occurrence of other mental disorders, and the potential for critical financial situations, the effect that gambling disorder can have on individual readiness and the military family could be significant.

DOD and Coast Guard
Medical Personnel State
That They Use Current
Diagnostic Standards to
Diagnose Gambling
Disorder and They Treat It
Using Established
Substance-Use Addiction
Treatment Programs

According to Defense Health Agency and service medical officials, both DOD and Coast Guard medical personnel use the *Diagnostic and* Statistical Manual of Mental Disorders criteria to diagnose servicemembers with gambling disorders, and they employ the same evidence-based practices, such as cognitive behavioral therapy, to treat the disorder. 30 DOD and Coast Guard medical providers diagnose and treat servicemembers on a case-by-case basis in behavioral- and mentalhealth departments of military treatment facilities. DOD also has dedicated outpatient programs for a variety of addiction and mental-health disorders. For example, the Navy has developed the "Centering Heroes on Integrating Changes and Enhancing Strength" program, in which medical professionals treat individuals with gambling disorder as well as other addictions. This program also includes treatment for post-traumatic stress and other mental-health disorders. In addition, each service provides counseling services on most bases where servicemembers can seek help and receive limited nonmedical treatment in the form of

²⁹GAO, Human Capital: Additional Actions Needed to Enhance DOD's Efforts to Address Mental Health Care Stigma, GAO-16-404 (Washington, D.C.: Apr. 18, 2016).

³⁰According to the National Institute of Mental Health, cognitive behavioral therapy is a blend of two therapies: cognitive therapy and behavioral therapy. Cognitive therapy focuses on a person's thoughts and beliefs, and how they influence a person's mood and actions, and aims to change a person's thinking to be more adaptive and healthy. Behavioral therapy focuses on a person's actions and aims to change unhealthy behavior patterns.

counseling sessions or other forms of support that do not require a medical diagnosis. Servicemembers may also be referred to civilian treatment facilities through TRICARE if inpatient treatment is required, as there are few residential DOD addiction treatment programs and none operated by the Coast Guard. Much like DOD, the competencies and resources of civilian facilities vary by location, but all locations that have state-certified mental-health providers are able to treat those with gambling disorder.

In addition to mental-health treatment, clinicians with whom we spoke stated that financial counseling is also an important part of gambling disorder treatment. Servicemembers with gambling disorder would be provided with financial counseling services in addition to mental-health treatment. DOD and Coast Guard officials stated that financial counseling programs are available to all servicemembers and their families. For example, the Navy operates the Fleet and Family Support Program that provides financial counseling services on all naval installations and is free to all servicemembers and their families.

According to DOD officials, military and civilian clinicians may have certifications or training specific to the treatment of gambling disorder, but it is not required to have these certifications or training to provide treatment. As long as the clinician maintains state-required licenses to treat individuals with mental-health disorders, the clinician is able to assess, diagnose, and treat conditions within the scope of practice determined by the state license and can treat gambling disorder with the training the clinician has. DOD mental-health providers include psychologists, psychiatrists, mental-health nurse practitioners, licensed social workers, and alcohol and drug counselors. Additional or supplemental training specific to gambling is made available to clinicians. For example, the Naval Medical Center San Diego offers continuing medical education, which includes a session on the clinical management of gambling disorder.

³¹DOD does not track the number of clinicians with specialty gambling disorder certification or training.

DOD and Coast
Guard Guidance
Does Not Address
Gambling Disorder in
a Similar Manner to
Other Addictive
Disorders

DOD and the Coast Guard do not have guidance that address gambling disorder in a similar manner as other addictive disorders, such as substance abuse. DOD Instruction 1010.04, Problematic Substance Use by DOD Personnel, outlines education and awareness policies for all DOD personnel, including commanders and nonmedical personnel, for substance use disorders, but not for gambling disorder, and officials were not aware of any other guidance that explicitly addressed gambling disorder.³² DOD health officials stated that this instruction "implicitly" covers gambling disorder: however, it refers only to problematic substance use and does not reference gambling disorder. DOD defines problematic substance use as the use of any substance in a manner that puts users at risk of failing in their responsibilities to mission or family, or that is considered unlawful by regulation, policy, or law. This definition includes substance use that results in negative consequences to the health or well-being of the user or others: or meets the criteria for a substance use disorder. However, DOD servicemembers without detailed knowledge of the 2013 Diagnostic and Statistical Manual of Mental Disorders that recategorized gambling disorder as an addiction rather than a behavior issue may not be able to translate its application to gambling disorder. In addition, the instruction establishes guidelines for problematic substance use, such as its incompatibility with readiness and military discipline, the goal of substance treatment programs to maintain force health and readiness, and implications for eligibility for access to classified information. As previously discussed, gambling disorder is the only non-substance-related condition categorized as an addiction in the Diagnostic and Statistical Manual of Mental Disorders. The nonsubstance-use terminology is significant because of its absence throughout the DOD instruction, while problematic substance use is a repetitive theme. Although medical personnel with whom we spoke are aware of the change in the treatment of gambling disorder between the manual's editions, this change is not reflected in the guidance for DOD's nonmedical personnel that would help ensure that servicemembers are referred to medical providers for gambling problems.

³²Department of Defense Instruction 1010.04, *Problematic Substance Use by DOD Personnel* (Feb. 20, 2014). The term "nonmedical personnel" refers to personnel without a requirement to be familiar with *Diagnostic and Statistical Manual of Mental Disorders*, such as senior enlisted personnel, chaplains, security officers, and financial counselors. The Under Secretary of Defense for Personnel and Readiness is responsible for developing policies to prevent and detect problematic substance use by DOD employees.

We also found that the DOD military services—Army, Marine Corps, Air Force, and Navy—do not include gambling disorder in their substance abuse policy and guidance documents:

- Army: Army Regulation 600-85, The Army Substance Abuse Program, provides alcohol- and drug-abuse prevention and control policies, as well as individual responsibilities. Officials from the Army Substance Abuse Program told us that the program does not provide services to servicemembers with gambling disorder. However, Army Regulation 600-85 derives its program authority from DOD Instruction 1010.04, which, according to Defense Health Agency officials, implicitly applies to gambling disorder and, therefore, requires the Army substance-abuse program to include gambling disorder as well. This example indicates that there is not a clear understanding whether DOD Instruction 1010.04 covers gambling disorder within the Army.
- Navy: The Navy provides its policy for alcohol- and drug-abuse prevention in Chief of Naval Operations Instruction 5350.4D, Navy Alcohol and Drug Abuse Prevention and Control. In addition, the Navy also uses the Bureau of Medicine and Surgery Instruction 5353.4B, Standards for Provision of Substance Related Disorder Treatment Services, to update a uniform set of standards for the provision of substance-related disorder treatment services within the Department of the Navy. Both of these Navy documents list the current version of the Diagnostic and Statistical Manual of Mental Disorders as a reference, but neither discusses any specific information on gambling disorder.
- Air Force: Air Force Instruction 44-121, Alcohol and Drug Abuse Prevention and Treatment (ADAPT) Program, outlines the Air Force's policies for its alcohol- and drug-abuse prevention and treatment program. The Air Force guidance does list the 2013 Diagnostic and Statistical Manual of Mental Disorders as a reference, but does not specifically mention gambling disorder.
- Marine Corps: Marine Corps Order 5300.17, Marine Corps Substance Abuse Program, provides policy and procedural guidance to commanders, substance-abuse personnel, and Marines to effectively use and carry out the Marine Corps substance-abuse program, and so that commanders may improve their capability to treat and prevent alcohol- and drug-abuse problems. This guidance does reference the 2013 Diagnostic and Statistical Manual of Mental Disorders, but does not include any policy or guidance information on gambling disorder.

The Coast Guard, which DOD Instruction 1010.04 does not cover, has three documents that provide guidance and policy to both medical and

nonmedical personnel on substance abuse, but Coast Guard officials stated that they do not have any policy that specifically discusses gambling disorder. However, they did indicate that, from a medical perspective, gambling disorder has multiple similarities with substance abuse and is treated in accordance with Commandant Instruction M6200.1C, Coast Guard Health Promotion Manual. While this document does not list the Diagnostic and Statistical Manual of Mental Disorders as a reference, it does mention it in several sections primarily in regard to diagnostic codes. Commandant Instruction M1000.10, Coast Guard Drug and Alcohol Abuse Program, details the Coast Guard's general administrative policies on the substance-use program, that although does not mention gambling disorder, is currently under revision to remove all reference to medical issues. Although Commandant Instruction M6000.1F Coast Guard Medical Manual, does refer to pathological gambling (the former name of gambling disorder), the manual classifies the condition as an impulse-control disorder, not as an addiction as prescribed by the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders. According to Commandant Instruction M6000.1F, a diagnosis of an impulse-control disorder may warrant separation from the Coast Guard, whereas certain types of substance use disorders are addressed in the Coast Guard Drug and Alcohol Abuse Program. Thus, gambling disorder is not being treated in the same manner as other addictive disorders, such as alcohol-use disorder.

According to GAO *Standards for Internal Control in the Federal Government*, management must communicate high-quality information internally to enable personnel to perform key roles in achieving objectives, addressing risks, and supporting the internal control system. In addition, these standards require that DOD communicates high-quality information throughout the entity using established reporting lines. High-quality information is to be communicated down, across, up, and around reporting lines to all levels of the entity. DOD and the Coast Guard do not explicitly communicate their policies to unit commanders and other nonmedical personnel that gambling disorder should be addressed in the same manner as other addictive disorders, such as substance-use disorders, that is, through each service's substance-use programs or civilian providers through TRICARE.

DOD has taken the initial step in communicating high-quality information regarding the diagnostic classification of gambling disorder as an addiction to its medical personnel through a memorandum in December

2013 directing the adoption of the recent edition of the Diagnostic and Statistical Manual of Mental Disorders. 33 Given this action, DOD health officials stated that DOD Instruction 1010.04 "implicitly" covers gambling disorder, but this implied knowledge would only likely be derived from a detailed awareness of the *Diagnostic and Statistical Manual of Mental* Disorders publication and its diagnostic classifications. Coast Guard officials told us they do not have a formal instruction on gambling disorder. Additionally, because the Coast Guard's medical manual, Commandant Instruction M6000.1F, is based on the previous edition of the Diagnostic and Statistical Manual of Mental Disorders, pathological gambling is not classified as an addiction. When the issue of gambling disorder was raised with DOD and Coast Guard health-care officials, the officials agreed that, while their guidance on substance use technically covers problem gambling, the guidance would help clarify if it was revised to explicitly include problem gambling. However, the officials at this point do not have any plans to update the guidance accordingly.

By not explicitly including mention of gambling disorders in its guidance for problematic substance use, the Office of the Secretary of Defense (OSD) and the military services, including the Coast Guard, are not communicating necessary policy, education, and awareness information to nonmedical personnel. As currently written, OSD and military service, including Coast Guard, personnel, such as unit commanders, do not have guidance that instructs them to refer personnel with gambling problems for medical evaluation of a potentially addictive disorder, thus possibly preventing personnel from receiving necessary and appropriate medical assistance. This could lead to administrative or disciplinary actions that address only the misconduct associated with the behavior. Also, gambling disorder is one of the factors that can also lead to the revocation or failing of a background security investigation for security clearances, thus affecting individual readiness and the capacity of the organization to meet its mission. While gambling disorder is a comparatively low-volume disorder, DOD instructions acknowledge that mental health issues may

³³DOD did not fully adopt the revised *Diagnostic and Statistical Manual of Mental Disorders* until after publication of DOD Instruction 1010.04. DOD Instruction 1010.04 was issued in February 2014 approximately 9 months after the recent *Diagnostic and Statistical Manual of Mental Disorders* was released. However, a memorandum from the Assistant Secretary of Defense for Health Affairs did not mandate transition to the revised edition of the *Diagnostic and Statistical Manual of Mental Disorders* be completed until October 2014. Assistant Secretary of Defense (Health Affairs) Memorandum, *Transitioning to the Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders* (Washington, DC: Dec. 11, 2013).

affect individual readiness.³⁴ Gambling disorder may also be a risk to national security. A 2006 memorandum from the Under Secretary of Defense for Intelligence stated that compulsive gambling is a concern as it may lead to financial crimes including espionage.³⁵ Absent explicit guidance, OSD, the DOD military services, and the Coast Guard risk not being able to identify and provide appropriate treatment and counseling to DOD and Coast Guard servicemembers afflicted by gambling disorder and mitigate or prevent individual readiness issues.

Conclusions

Gambling disorder has been identified within the medical community as an addiction similar to drug or alcohol use. Gambling disorder can also develop in conjunction with other addictions. Gambling disorder is a risk factor for suicide—and according to the Diagnostic and Statistical Manual of Mental Disorders about 17 percent of individuals in treatment for gambling disorder attempt suicide at some point in their life. A person with gambling disorder may also have financial or legal issues that, combined with other addictions, could spiral out of control. According to the American Psychiatric Association, only 10 percent of individuals with gambling disorder seek treatment. However, DOD and the Coast Guard do not include gambling disorder questions as part of a systematic screening process for identifying servicemembers who may have a gambling disorder. Implementing systematic screening for gambling disorder may help to identify servicemembers with problem gambling or gambling disorder. Without incorporating medical screening questions specific to gambling disorder, gambling problems may not be identified until they reach a critical point affecting the individual's readiness in addition to harming the financial situation of the servicemember and, potentially, national security.

In addition, guidance for nonmedical personnel does not discuss gambling disorder as an addiction; therefore, DOD and service guidance

³⁴Department of Defense Instruction 6025.19, *Individual Medical Readiness (IMR)*, para. 3d (June 9, 2014) (stating that servicemembers have a responsibility to report mental health issues that may affect their individual readiness); Department of Defense Instruction 6490.07, *Deployment-Limiting Medical Conditions for Service Members and DoD Civilian Employees*, encl. 3 (Feb. 5, 2010) (stating that individuals with certain mental health disorders shall not deploy unless a waiver is granted).

³⁵Under Secretary of Defense for Intelligence Memorandum, *Implementation of Adjudicative Guidelines for Determining Eligibility for Access to Classified Information*, Guideline F (Dec. 29, 2005) (as modified, effective Sept. 1, 2006).

do not direct nonmedical personnel that gambling should be treated in a medical manner. Explicitly including gambling disorder in guidance would identify it as a medical issue for nonmedical personnel. Communicating this change throughout DOD would make clear the proper steps to be taken to address this addiction before it becomes an administrative or disciplinary issue. Given the importance of and concern with maintaining individual readiness among servicemembers, without updated guidance to nonmedical personnel, DOD and the Coast Guard may not be able to increase awareness that gambling disorder is a medical condition and that individuals with a potential gambling problem should be referred to appropriate medical officials.

Recommendations for Executive Action

We recommend that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness to take the following two actions:

- Incorporate medical screening questions specific to gambling disorder as part of a systematic screening process across DOD, such as DOD's annual Periodic Health Assessment, for behavioral and mental-health issues.
- Update DOD Instruction 1010.04, *Problematic Substance Use by DOD Personnel*, to explicitly include gambling disorder as defined in the 2013 *Diagnostic and Statistical Manual of Mental Disorders*.

We recommend that the Secretary of Defense direct the Secretary of the Army to take the following action:

• Update Army Regulation 600-85, *The Army Substance Abuse Program*, to explicitly include gambling disorder.

We recommend that the Secretary of Defense direct the Secretary of the Navy to take the following action:

• Update Naval Operations Instruction 5350.4D, *Navy Alcohol and Drug Abuse Prevention and Control*, to explicitly include gambling disorder.

We recommend that the Secretary of Defense direct the Secretary of the Air Force to take the following action:

 Update Air Force Instruction 44-121, Alcohol and Drug Abuse Prevention and Treatment (ADAPT) Program, to explicitly include gambling disorder.

We recommend that the Secretary of Defense direct the Commandant of the Marine Corps to take the following action: • Update Marine Corps Order 5300.17, *Marine Corps Substance Abuse Program*, to explicitly include gambling disorder.

We recommend that the Commandant of the Coast Guard take the following two actions:

- Update Commandant Instruction M6000.1F, Coast Guard Medical Manual, to classify gambling disorder as an addiction and not as an impulse control issue.
- Update Commandant Instruction M1000.10, Coast Guard Drug and Alcohol Abuse Program, to explicitly include gambling disorder.

Agency Comments and Our Evaluation

We provided a draft of this report to DOD and the Department of Homeland Security for review and comment. In written comments, reproduced in appendix III, DOD concurred with five recommendations, did not concur with one recommendation, and provided two substantive technical comments for our consideration. In written comments, reproduced in appendix IV, the Department of Homeland Security concurred with both of the recommendations directed to the Coast Guard and, separately, provided technical comments, which we incorporated as appropriate.

DOD

DOD concurred with the five recommendations to update DOD and military service policies to explicitly include gambling disorder as defined in the 2013 Diagnostic and Statistical Manual of Mental Disorders. However, DOD did not concur with our recommendation to incorporate medical screening questions specific to gambling disorder as part of a systematic screening process across DOD, such as in DOD's annual Periodic Health Assessment for behavioral and mental-health issues. In its written comments. DOD stated that there is no evidence to suggest that gambling disorder is a high-prevalence disorder in DOD and that it is impractical to screen for every low-prevalence disorder. DOD noted that there are numerous mental health disorders with similar or higher prevalence (e.g., bipolar disorder, psychotic disorders, and obsessivecompulsive disorder) for which DOD does not routinely screen. DOD stated that screening for additional conditions in the Periodic Health Assessment adds time and resources and would require an additional burden on the servicemember and provider. DOD noted that priority to screen for a disorder is given to high-risk, high-volume, and problemprone disorders with validated measures for assessment.

We disagree that DOD can definitively conclude that gambling disorder and problem gambling among DOD and Coast Guard servicemembers are "low prevalence," and therefore related screening questions should not be a part of a systematic screening. First, as we noted in our report, DOD prevalence data are limited to those compiled in the Military Health System Data Repository, which reflects only DOD and Coast Guard servicemembers who seek care for gambling-related issues through the TRICARE system, and excludes information from sources outside of the Military Health System. These sources include, for example, nonmedical counseling that a Marine might receive from the Marine Corps Community Counseling Program, Behavioral Health Program, or Consolidated Substance Abuse Counseling Center; from treatment or counseling provided at civilian facilities outside the TRICARE system; or from counseling received at local support groups, such as Gamblers Anonymous. Second, the data do not reflect care received by Reserve Component members unless they are on active orders for more than 30 days. Third, the data does not account for those who do not seek care inside or outside the TRICARE system. Screening specifically for gambling disorder takes on particular importance because, as noted in the 2013 Diagnostic and Statistical Manual of Mental Disorders (i.e., the primary source used by civilian and military mental-health-care providers to diagnose mental disorders), less than 10 percent of individuals with gambling disorder seek help and because, according to the American Society of Addiction Medicine, gambling disorder can be easier to hide than other addictions. According to the 2013 Diagnostic and Statistical Manual of Mental Disorders, persons diagnosed with gambling disorder exhibit a preoccupation with gambling, are at risk of a higher rate of a cooccurrence of other mental disorders, are at increased risk of suicide, and are at risk of critical financial situations. We note that these issues can pose a significant risk to individual readiness and, potentially, to national security.

Furthermore, DOD stated that the two examples for screening-question sets that we cite in our report, the "Lie/Bet" screening and the South Oaks Gambling Screen are not appropriate diagnostic tools because the "Lie/Bet" screening has scored poorly as a diagnostic screening tool and the South Oaks Gambling Screen has a high rate of false positives and would result in an additional burden to servicemembers and the provider. To clarify, in our recommendation we do not limit DOD to using these two examples for screening-question sets as the specific questions that we are recommending that DOD incorporate as part of a systematic screening process across DOD. DOD further stated that it is actively engaged in screening servicemembers for financial difficulties and other

symptoms often associated with gambling through the Health Related Behavior Survey and the Periodic Health Assessment. As we note in our report, limiting screening to questions about financial difficulties will likely not result in the identification of individuals with gambling disorder before it affects individual readiness. Due to each of these reasons, we continue to believe that our recommendation to incorporate medical screening questions specific to gambling disorder as part of a systematic screening process across DOD is valid.

DOD also included two substantive technical comments as part of its written response. First, DOD stated that it is unclear what is within our scope for inclusion of epidemiological studies on the prevalence of gambling disorder. DOD felt the prevalence percentages in the Kessler study (2008) should have been included as part of our results. We did identify this study in our literature search and, although it was published after 2006, the data were collected between 2001 and 2003, which is outside the time frame of our review, as stated in appendix II. To address DOD's comment, we included more specific language related to the scope of the literature search in the abbreviated scope and methodology section earlier in the report. Second, DOD noted that our statement regarding 8 suicides and 13 suicide attempts related to gambling behavior should be put into context. Specifically, DOD stated that, according to DOD Suicide Event Reporting data, only 0.6 percent of all suicides and 0.3 percent of all attempts had a history of problem gambling. We did not address this comment in the report because the contextualization does not apply to the entire scope of the population included in this review. DOD Suicide Event Reporting data do not include the entire reserve component population—as we stated in the report—only those in an active-duty status. As a result, including these percentages would not be appropriate in this case.

Department of Homeland Security

The Department of Homeland Security concurred with the recommendations to update Commandant Instruction M6000.1F and Commandant Instruction M1000.10 to explicitly include gambling disorder. With respect to Commandant Instruction M1000.10, they stated that it is currently under revision and being updated to remove all references to medical issues and associated terminology, including those related to gambling disorder. Once revised, the manual will strictly focus on administrative separation policy based on misconduct associated with alcohol and drug abuse and will meet the intent of our recommendation.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Defense, the Under Secretary of Defense for Personnel and Readiness, the Chairman of the Joint Chiefs of Staff, the Secretaries of the military departments, the Secretary of Homeland Security, and the Commandant of the Coast Guard. The report is also available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-3604 or farrellb@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix V.

Brenda S. Farrell

Director, Defense Capabilities and Management

Brenda & Jarrell

List of Committees

The Honorable John McCain Chairman The Honorable Jack Reed Ranking Member Committee on Armed Services United States Senate

The Honorable Thad Cochran Chairman The Honorable Richard Durbin Ranking Member Subcommittee on Defense Committee on Appropriations United States Senate

The Honorable Mac Thornberry Chairman The Honorable Adam Smith Ranking Member Committee on Armed Services House of Representatives

The Honorable Kay Granger Chairwoman Ranking Member Subcommittee on Defense Committee on Appropriations House of Representatives

Appendix I: Number and Location of Slot Machines by Military Service on Department of Defense Military Installations Overseas

On certain overseas U.S. military installations, the Department of Defense (DOD) has slot machines both to generate revenue to fund other recreational activities and to serve as a recreational opportunity for DOD servicemembers, their adult family members, and local civilians with access to the installations. The slot machines are generally located in recreational centers, such as bowling alleys and clubs for officers and enlisted personnel. As of July 31, 2016, DOD has 3,141 slot machines located primarily on installations in Japan, the Republic of Korea, and Germany, as shown in table 4.

Table 4: Number and Location of Slot Machines by Military Service on Department of Defense Overseas Military Installations, as of July 31, 2016

Country	Army	Navy	Marine Corps	Air Force	Total
Japan	48	308	377	424	1,159
Germany	573	0	0	209	782
Republic of Korea	418	10	0	171	599
Italy	74	104	0	53	231
United Kingdom	0	0	0	157	157
Spain	0	65	0	0	65
Diego Garcia	0	52	0	0	52
Turkey	0	0	0	47	47
Greece	0	24	0	0	24
Greenland	0	0	0	13	13
Singapore	0	8	0	0	8
Azores	0	0	0	6	6
Total	1,113	571	377	1,080	3,141

Source: Department of Defense. | GAO-17-114

The Army Recreation Machine Program, under the Army Installation Management Command, operates slot machines on Army, Navy, and Marine Corps installations. The Army operates most of the slot machines on Navy installations and all of the slot machines on Marine Corps

Appendix I: Number and Location of Slot Machines by Military Service on Department of Defense Military Installations Overseas

installations in accordance with two memorandums of agreement. The Army's revenue generated from slot machines comprises the revenue from slot machines on Army installations and a share of the revenues generated from slot machines on Navy and Marine Corps installations. The Navy and Marine Corps receive a share of the revenues generated from slot machines on their respective installations by mutual agreement with the Army on a site-by-site basis. The Navy's proceeds also include revenue generated from Navy-operated machines on installations on Diego Garcia.² The Air Force Gaming Program, part of the Air Force Personnel Center, operates all of the Air Force's slot machines, and the Air Force retains all of the revenue from these slot machines. The Army and the Air Force pay for nonappropriated personnel, operation, maintenance, and other overhead expenses related to the slot machines out of their respective proceeds. The Navy pays only for personnel. operation, maintenance, and other overhead expenses for the Navyoperated machines on Diego Garcia. Coast Guard installations overseas do not have any slot machines.

According to data provided by DOD, in fiscal years 2011 through 2015, DOD-run slot machines generated a total of \$538.9 million in revenue. DOD calculates this revenue, listed by service in table 5, by subtracting payouts to gamblers from the amounts they paid to play.

Table 5: Annual Revenue from Slot Machines on Department of Defense Overseas Military Installations (Fiscal Years 2011 through 2015)

Dollars in millions

Fiscal year	Army ^a	Navy ^b	Marine Corps ^c	Air Force	Total
2011	56.8	15.5	19.2	31.8	123.3
2012	52.4	15.8	18.6	32.7	119.5

¹The Navy operates 52 slot machines at the Naval Support Facility Diego Garcia, as of fiscal year 2016. Department of Defense, *Memorandum of Agreement between The U.S. Army Installation Management Command (IMCOM) and the U.S. Navy, Commander Navy Installations Command (CNIC), Placement and Operation of Gaming Machines on Navy Installations (June 4, 2015); Memorandum of Agreement between the U.S. Army Installation Management Command G9 and Headquarters, U.S. Marine Corps, NAF Business and Support Services Division, Placement and Operation of Gaming Machines in Marine Corps Community Services (MCCS) Activities in Japan (Sept. 5, 2014).*

²The Navy operated slot machines in Yokosuka, Japan, until October 2015 and in Singapore until June 2016 and directly collected revenue from those machines before the Navy turned over the machines' operation to the Army Recreation Machine Program.

Appendix I: Number and Location of Slot Machines by Military Service on Department of Defense Military Installations Overseas

Fiscal year	Army ^a	Navy ^b	Marine Corps ^c	Air Force	Total
2013	47.3	14.2	17.2	30.1	108.8
2014	42.1	12.2	16.0	27.9	98.1
2015	38.0	10.7	14.7	25.8	89.2
Total	236.5	68.4	85.7	148.3	538.9

Source: Department of Defense. | GAO-17-114

Notes: Dollar amounts reflect revenue, the amount gamblers paid to play minus payouts. Slot machines are not permitted on domestic military installations. The Coast Guard does not operate any slot machines. Numbers may not add to totals because of rounding.

^aArmy figures include revenues from slot machines on Army installations as well as the part of revenues from slot machines on Navy and Marine Corps installations that the Army Recreation Machine Program maintains and operates for the Navy and Marine Corps.

^bNavy figures reflect the reimbursements from the Army Recreation Machine Program in addition to revenues from Navy-operated slot machines on Diego Garcia and in other locations that the Navy has since turned over to the Army Recreation Machine Program.

^cMarine Corps figures reflect reimbursements from the Army Recreation Machine Program.

Appendix II: Scope and Methodology

The scope of our review included all Department of Defense (DOD) and Coast Guard offices responsible for oversight or administration of gambling activities and medical commands or offices responsible for diagnosing and treating gambling disorder. We included both the active and reserve components, including the federal components of the National Guard. Table 6 contains a list of the agencies and offices we contacted during the course of our review.

Department of Defense	Office of the Under Secretary of Defense for Personnel and Readiness, Washington, D.C.	
	Defense Health Agency, Falls Church, Virginia	
	National Guard Bureau, Arlington, Virginia	
	 Armed Forces Chaplains Board, Washington, D.C. 	
	National Center for Telehealth and Technology, Joint Base Lewis-McChord, Washington	
	 Consolidated Adjudication Facility, Fort George G. Meade, Maryland 	
Army	U.S. Army Installation Management Command, Fort Sam Houston, Texas	
•	U.S. Army Medical Command, San Antonio, Texas	
	Fort Irwin, California	
	Army National Guard, Arlington, Virginia	
	Camp Zama, Japan	
	Yongsan Garrison, Republic of Korea	
Air Force	Air Force Medical Operations Agency, San Antonio, Texas	
	 Air Force Services Activity, Joint Base San Antonio-Lackland, Texas 	
	 Los Angeles Air Force Base, El Segundo, California 	
	Air National Guard, Joint Base Andrews, Maryland	
Navy	U.S. Navy Bureau of Medicine and Surgery, Falls Church, Virginia	
	 Commander, Navy Installation Command, Washington, D.C. 	
	U.S. Naval Hospital Okinawa, Japan	
Marine Corps	Marine and Family Programs Division, Headquarters Marine Corps, Arlington, Virginia	
	Marine Corps Base Camp Pendleton, California	
	Marine Corps Air Station Futenma, Okinawa, Japan	
U.S. Coast Guard	U.S. Coast Guard Headquarters, Washington, D.C.	
	 U.S. Coast Guard Station Los Angeles/Long Beach, California 	
Other	U.S. Department of Veterans Affairs, Washington, D.C.	
	 Substance Abuse and Mental Health Administration, U.S. Department of Health and Human Services, Rockville, Maryland 	
	 National Council on Problem Gambling, Washington, D.C. 	
	Gambling Studies Program, University of California–Los Angeles, Los Angeles, California	

Source: GAO. | GAO-17-114

To describe what is known about the prevalence of gambling disorder among servicemembers in DOD and the Coast Guard (objective 1), we

analyzed the most-recent data from the Military Health System Data Repository for fiscal years 2011–2015 for active duty servicemembers from the military services, including the Coast Guard, and Reserve Component servicemembers diagnosed with gambling disorder or seen for problem gambling. To assess the reliability of these data, we sent a questionnaire to officials from the Defense Health Agency, which oversees the Military Health System Data Repository system, and interviewed knowledgeable Defense Health Agency and service officials about how the data are entered, collected, stored, and processed. We also met with service mental-health providers to learn, among other things, how they diagnose patients and enter their information into the electronic health records. We also reviewed Military Health System Data Repository documentation including the user's guide and data dictionary. We analyzed the summary data for accuracy and obvious errors, and we found none. We found these data to be sufficiently reliable to show the number of servicemembers seen for gambling disorder, pathological gambling, or problem gambling in the Military Health System in fiscal years 2011 through 2015.

In addition, we reviewed DOD's most-recent health-related behaviors surveys that included specific questions on gambling—conducted in 2002 for the active component and in 2010 and 2011 for the Reserve and National Guard—to identify what is known about the prevalence of problematic gambling behaviors among servicemembers. We analyzed Department of Veterans Affairs data on the prevalence of problem gambling and gambling disorder, interviewed cognizant officials, and reviewed Department of Veterans Affairs medical record documentation. We reviewed summary data for accuracy and obvious errors and determined that the data were sufficiently reliable to report on the total number of individuals diagnosed with gambling disorder or seen for problem gambling in the Department of Veterans Affairs system. We also conducted literature searches regarding the prevalence of problem gambling and gambling disorder in the general population as well as the military population. Specifically, for the military prevalence review, we searched for studies reporting the prevalence of problem gambling within the active and reserve (but not veteran) U.S. military population, including the Coast Guard, in English-language professional journals, government reports, and other published and unpublished papers published between 2001 and 2016. We searched Proguest, Proguest professional, SCOPUS, Homeland Security Digital Library, ECO, ArticleFirst, WorldCat, PolicyFile, and CQ hearings databases using search terms including variations and Boolean combinations of the following terms: DOD, defense, armed forces, military, army, navy, marines, air force, coast guard, service

members, gambling, betting, wagering, gaming, casino, prevalence, risks, problem, diagnosed, treated, treatment, and financial counseling. This search resulted in identifying 94 potentially relevant sources. We screened these sources by reviewing the titles and abstracts and other necessary bibliographic information and excluded sources that were out of scope. We also reviewed bibliographies to identify additional sources, but no new sources meeting the review criteria were identified. This process resulted in identifying four sources for a complete review, of which two were found not to contain relevant data. DOD also brought two other DOD survey studies to our attention, making one of the search-based studies obsolete. Therefore, a total of three studies on military prevalence were fully reviewed by two specialists and are described in this report.

For the U.S. general-population prevalence review, we searched for studies reporting the prevalence of problem gambling in the adult U.S. general population in English-language professional journals, government reports, and other published and unpublished papers published with data collected in 2006 or later. We searched Proguest, Proguest professional, SCOPUS, Homeland Security Digital Library, ECO, ArticleFirst, WorldCat, PolicyFile, and CQ hearings databases using search terms including variations and Boolean combinations of the following terms: Gambling, gambler, problem, disorder, pathological, personality traits, prevalence, risk, population, statistics, epidemiology, risk factors, frequency, occurrence, rate, amount, occasion, incident, US, USA, and United States. This search resulted in identifying 278 potentially relevant sources. We then modified the criteria to include only studies with data collected in or after 2006 because this would more closely match data provided by DOD. We screened the sources by reviewing the titles and abstracts and other necessary bibliographic information and excluded sources that were out of scope. We also reviewed bibliographies to identify additional sources, but no new sources meeting the review criteria were identified. Thirty of the 278 sources were excluded because they were redundant with other sources, and another 224 were excluded because they were out of scope. Three sources from the 278 sources were reviewed to identify new sources from their bibliographies but they did not identify any new in-scope sources. This process resulted in selecting 21 sources for a full review. However, upon reviewing them, 2 were found to be redundant with the previously discussed sources, and 18 were found to be out of scope or were review papers that did not contain any new in-scope sources. Therefore, only one study was found to meet the review criteria. That study was fully reviewed by two specialists and is described in this report.

We also interviewed DOD and Coast Guard officials regarding the prevalence and risk associated with gambling disorder. We also conducted a literature search to identify any studies testing the hypothesis that increased availability of gambling opportunities leads to higher prevalence of problem gambling within the military population. We initially searched for any studies reporting the correlation between gambling availability and problem gambling in any adult general population around the world, published in English-language professional journals, government reports, and other published and unpublished papers between 1996 and 2016. We conducted the initial search through Proquest, SCOPUS, Web of Science, ECO, ArticleFirst, WorldCat, and PolicyFile databases using search terms including variations and Boolean combinations of the following terms: Gambling, gambler, problem, disorder, pathological, availability, proximity, accessibility, near, correlated, correlation, associated, association, causation, causal, and related. This search identified 62 potentially relevant sources. Two were excluded because they were redundant with another source or were updated by another source already in our list, and another 39 were excluded because they were found to be outside the original scope. Based on the original search criteria, 21 were identified as potentially relevant to be reviewed in full or for a bibliography review. We then narrowed the criteria to any studies that reported estimates of the causal effect of gambling availability on problem gambling in the U.S. military population. We scanned the titles and abstracts and other necessary bibliographic information, or fully reviewed sources, and determined that no studies estimated the causal effect of gambling availability on problem gambling in the U.S. military population.

To assess DOD's and the Coast Guard's approaches to screening, diagnosing, and treating servicemembers for gambling disorder (objective 2), we reviewed the primary source of criteria for civilian and military mental health professions for diagnosing patients with gambling disorder—the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. We reviewed screening tools, such as the DOD's Periodic Health Assessment to identify whether they contained gambling disorder screening questions. We also reviewed the American Society of Addiction Medicine treatment criteria for addictive conditions, which assess the appropriate treatment venue for each patient based on a multidimensional assessment; these criteria were designed to define one national set of criteria for providing

outcome-oriented and results-based care in the treatment of addiction.1 We interviewed mental-health officials, counselors, chaplains, and personnel-security officials regarding the screening, diagnosis, counseling, and treatment of individuals with gambling disorder. We also conducted interviews with officials from both domestic and overseas bases to determine practices and methods for diagnosing and treating gambling disorder. We selected a nongeneralizable sample of four military installations that represented all four DOD military services as well as the Coast Guard and had reported at least one diagnosed case of gambling disorder. We also selected these installations because they were in close proximity to each other and close to GAO facilities in the Southern California area, for cost reasons. In addition, the California National Guard provided written responses to questions on the diagnosis and treatment of gambling disorder. We selected and met with Army, Navy, and Marine Corps representatives from four overseas bases in the Republic of Korea and Japan that had reported more than one case of gambling disorder or problem gambling in fiscal years 2011–2015 or had DOD-run slot machines.² Only two combatant commands have bases with slot machines—U.S. Pacific Command and U.S. European Command. We chose bases in U.S. Pacific Command, which had an outpatient program for servicemembers with gambling disorder in Okinawa, Japan. We were unable to arrange any meetings with Air Force bases in the Republic of Korea and Japan. The overseas interviews included chaplains stationed in this theater. We also reviewed DOD data on suicide and suicide attempts that were related to gambling. At our request, DOD conducted a search of its Suicide Event Report using the following search terms: gamble, debt, bookie, casino, roulette, cards, poker. The resulting numbers are underestimates of the number of suicides and attempted suicides due to the way the data are collected; the magnitude of the underestimation is unknown, according to DOD officials. The officials reviewed the search results to ensure that the content was indicative of monetary gambling (i.e., to ensure that "debt" referenced gambling debts and not other sources of debt, such as credit card debt or child support). Death-risk gambling (e.g., Russian Roulette) was excluded in this analysis. The search identified 8 deaths due to

¹American Society of Addiction Medicine, *The ASAM Criteria: Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions*, 3rd ed. (Chevy Chase, MD: 2013).

²We interviewed mental health providers on Camp Zama, Japan; U.S. Naval Hospital, Camp Foster, Japan; Marine Corps Air Station Futenma, Japan; and Yongsan Garrison, Republic of Korea.

suicide and 13 suicide attempts between fiscal years 2011 and 2015 where the behavioral-health professional completing the DOD Suicide Event Report indicated any gambling behavior as a relevant antecedent factor. DOD stated the occurrence of gambling behavior should not be interpreted as being causally related to the occurrence of the suicide behavior.

To evaluate the extent to which DOD and Coast Guard guidance address gambling disorder in a manner similar to substance-use disorder, we compared DOD's and the Coast Guard's respective policies on substance use against GAO's Standards for Internal Control in the Federal Government. According to Standards for Internal Control in the Federal Government, management must communicate high-quality information internally to enable personnel to perform key roles in achieving objectives, addressing risks, and supporting the internal control system. We also reviewed DOD (including service-level) and Coast Guard guidance pertaining to the screening, diagnosis, and treatment of gambling disorder. We compared mental-health criteria documents such as the 2013 Diagnostic and Statistical Manual of Mental Disorders to DOD and service-level guidance to assess congruence. Our review included the following documents:

- DOD Instruction 1010.04, Problematic Substance Use by DOD Personnel (Feb. 20, 2014);
- DOD Instruction 6025.19, Individual Medical Readiness (June 9, 2014);
- Army Regulation 600-85, The Army Substance Abuse Program (Dec. 28, 2012);
- Chief of Naval Operations Instruction 5350.4D, Navy Alcohol and Drug Abuse Prevention and Control (June 4, 2009);
- Bureau of Medicine and Surgery Instruction 5353.4B, Standards for Provision of Substance Related Disorder Treatment Services (July 6, 2015);
- Air Force Instruction 44-121, Alcohol and Drug Abuse Prevention and Treatment (ADAPT) Program (July 8, 2014);
- Marine Corps Order 5300.17, Marine Corps Substance Abuse Program (April 11, 2011);
- Commandant Instruction M6200.1C, Coast Guard Health Promotion Manual (July 9, 2015);

- Commandant Instruction M1000.10, Coast Guard Drug and Alcohol Abuse Program (Sept. 29, 2011);
- Commandant Instruction M6000.1F, Coast Guard Medical Manual (Aug. 22, 2014);
- American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; and
- American Society of Addiction Medicine, The ASAM Criteria: Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions, Third Edition.

We conducted this performance audit from December 2015 to January 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix III: Comments from the Department of Defense



HEALTH AFFAIRS

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, DC 20301-1200

DEC 16 2016

Ms. Brenda S. Farrell Director, Defense Capabilities Management U.S. Government Accountability Office 441 G Street, NW Washington, D.C. 20548

Dear Ms. Farrell:

This is the Department of Defense (DoD) response to the Government Accountability Office (GAO) Draft Report GAO-17-114, "MILITARY PERSONNEL: DOD and the Coast Guard Need to Screen for Gambling Disorder Addiction and Update Guidance," dated November 17, 2016 (GAO Code 100518). The DoD acknowledges receipt of the Draft Report and official written comments are included in the enclosed Summary of Recommendations. The DoD concurs with seven of the eight recommendations. The DoD non-concurs with Recommendation 1 to incorporate medical screening questions specific to gambling disorder as part of a systematic screening process across the DoD. Current evidence indicates that Gambling Disorder is a very low prevalence illness within the Service member population. The DoD concurs with updating pertinent policies to explicitly address gambling disorder, which will promote education and awareness activities intended to prevent or reduce problematic gambling.

Sincerely

Karen S. Guice, M.D., M.P.P.

Principal Deputy, Performing the Duties of the Assistant Secretary of Defense for Health

Enclosure: As stated

GOVERNMENT ACCOUNTABILITY OFFICE DRAFT REPORT DATED NOVEMBER 17, 2016 GAO-17-114 (GAO CODE 100518)

"MILITARY PERSONNEL: DOD AND THE COAST GUARD NEED TO SCREEN FOR GAMBLING DISORDER ADDICTION AND UPDATE GUIDANCE"

DEPARTMENT OF DEFENSE COMMENTS TO THE GAO RECOMMENDATIONS

RECOMMENDATION 1: The Government Accountability Office (GAO) recommends that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness to incorporate medical screening questions specific to gambling disorder as part of a systematic screening process across the Department of Defense (DoD), such as the DoD's annual Periodic Health Assessment (PHA), for behavioral and mental health issues.

DOD RESPONSE: The DoD non-concurs with this recommendation. There is no evidence to suggest that gambling disorder is a high prevalence disorder in the DoD, and it is impractical to screen for every low prevalence disorder. There are numerous mental health disorders with similar or higher prevalence (e.g., Bipolar Disorder, Psychotic Disorders, Obsessive Compulsive Disorder) for which the DoD does not routinely screen. Screening for additional conditions on the PHA adds time, resources, and required training with additional burden on the Service member and provider. The decision on whether to screen for a disorder is carefully scrutinized within the DoD, with the priority given to high risk, high volume, and problem-prone disorders with validated measures for assessment.

Routine screening is done for Post-traumatic Stress Disorder (PTSD) using the PTSD Checklist (PCL), depression using the Patient Health Questionnaire-8 (PHQ-8), and alcohol misuse using the Alcohol Use Disorders Identification Test (AUDIT-C), because these are high prevalence conditions with validated screening tools. There is no validated equivalent instrument for gambling disorder that is comparable to the PCL, PHQ-8, or the AUDIT-C. The two-item Lie-Bet Screen is designed to rule out gambling and has scored poorly as a diagnostic screening tool (Gotstam, et al. 2004). The 16-item South Oaks Gambling screen is known to have a high rate of false positives in many samples (Rugle, 2004), which would result in additional burden to the Service member and provider. Also, with such a low prevalence of gambling disorder in our population, the predictive value of any screening tool would be very low.

The DoD is actively engaged in ways to capture and provide assistance for Service members with financial difficulties including, but not limited to, gambling. Service members are screened for financial difficulties on the Health Related Behavior Survey and PHA. Furthermore, other symptoms (including depression, substance use, and suicidality) are often associated with gambling and are already screened for in the PHA.

The DoD concurs with updating DoD and Service policies to include gambling disorder, which will promote education and awareness activities intended to prevent or reduce problematic

gambling disorder. The DoD believes that updating our policies will bring more attention to gambling as an addictive disorder without the need for specific screening questions.

RECOMMENDATION 2: The GAO recommends that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness update DoD Instruction 1010.04, "Problematic Substance Use by DoD Personnel," dated February 20, 2014, to explicitly include gambling disorder as defined in the 2013 Diagnostic and Statistical Manual of Mental Disorders.

DOD RESPONSE: The DoD concurs with this recommendation and will begin updating the instruction.

RECOMMENDATION 3: The GAO recommends that the Secretary of Defense direct the Secretary of the Army to update Army Regulation 600-85, "The Army Substance Abuse Program," to explicitly include gambling disorder.

DOD RESPONSE: The DoD concurs with this recommendation.

RECOMMENDATION 4: The GAO recommends that the Secretary of Defense direct the Secretary of the Navy to update Naval Operations Instruction 5350.4D, "Navy Alcohol and Drug Abuse Prevention and Control," to explicitly include gambling disorder.

DOD RESPONSE: The DoD concurs with this recommendation.

RECOMMENDATION 5: The GAO recommends that the Secretary of Defense direct the Secretary of the Air Force to update Air Force Instruction 44-121, "Alcohol and Drug Abuse Prevention and Treatment (ADAPT) Program," to explicitly include gambling disorder.

DOD RESPONSE: The DoD concurs with this recommendation.

RECOMMENDATION 6: The GAO recommends that the Secretary of Defense direct the Commandant of the Marine Corps to update Marine Corps Order 5300.17, "Marine Corps Substance Abuse Program," to explicitly include gambling disorder.

DOD RESPONSE: The DoD concurs with this recommendation.

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RECOMMENDATION 7: The GAO recommends that the Commandant of the Coast Guard update Commandant Instruction M6000.1F, "Coast Guard Medical Manual," to classify gambling disorder as an addiction and not as an impulse control issue.

DOD RESPONSE: The DoD defers to the Commandant of the Coast Guard for this recommendation.

RECOMMENDATION 8: The GAO recommends that the Commandant of the Coast Guard update Commandant Instruction M1000.10, "Coast Guard Drug and Alcohol Abuse Program," to explicitly include gambling disorder.

Appendix III: Comments from the Department of Defense

DOD RESPONSE: The DoD defers to the Commandant of the Coast Guard for this recommendation.

TECHNICAL COMMENTS: In addition to the response to the recommendations, DoD has two critical comments for GAO's consideration.

CRITICAL COMMENT 1: In the first full paragraph on page 13, it is unclear what is within GAO's scope for inclusion of epidemiological studies on the prevalence of gambling disorder. For example, one epidemiological study reviewed by DoD found that the lifetime prevalence (with standard error in parentheses) estimate of problem gambling is 2.3% (1.1), while the lifetime prevalence estimate of pathological gambling is 0.6% (0.1). The estimated 12-month prevalence of pathological gambling is 0.3% (0.1) (Kessler, 2008). Without including the guidelines, it appears the literature review did not include all relevant studies.

CRITICAL COMMENT 2: In paragraph 1 on page 15, GAO's report of "8 suicides and 13 suicide attempts related to gambling behavior," should be put into context. According to DoD Suicide Event Reporting data, only 0.6% of all suicides and 0.3% of all attempts had a history of problem gambling.

REFERENCES:

Götestam KGA, Johansson HG, Wenzel Simonsen I-E. Validation of the Lie/Bet Screen for pathological gambling on two normal population data sets. Psychological Reports. 2004; 95(3 Pt 1):1009–13.

Kessler, RC. The Prevalence and Correlates of DSM-IV Pathological Gambling in the National Comorbidity Survey. ReplicationPsychol Med. 2008 September; 38(9): 1351–1360.

Rugle, L. The Treatment of Problem and Pathological Gambling. Sacramento: California Office of Problem Gambling; 2004.

Appendix IV: Comments from the Department of Homeland Security

U.S. Department of Homeland Security Washington, DC 20528



December 15, 2016

Brenda S. Farrell
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Re: Management's Response to Draft Report GAO-17-114, "MILITARY

PERSONNEL: DOD and Coast Guard Need to Screen for Gambling Disorder

Addiction and Update Guidance"

Dear Ms. Farrell:

Thank you for the opportunity to review and comment on this draft report. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office's (GAO) work in planning and conducting its review and issuing this report.

The Department is pleased to note GAO's positive recognition of established U.S. Coast Guard's (USCG) support mechanisims for gambling disorders, such as Coast Guard Support, a confidential program similar to the Department of Defense Military OneSource program, and chaplain counseling services. USCG leadership remains committed to providing world class medical services to Coast Guard members, including those that might suffer from the ill effects of a gambling disorder addiction.

The draft report contained two recommendations for the USCG with which the Department concurs. Attached find our detailed response to each recommendation.

Again, thank you for the opportunity to review and comment on this draft report. Technical comments were previously provided under separate cover. Please feel free to contact me if you have any questions. We look forward to working with you in the future.

Sincerely

M H. CRUMPACKER, CIA, CFE

Director

Departmental GAO-OIG Liaison Office

Attachment

Attachment: DHS Management Response to Recommendations Contained in Draft Report GAO-17-114

GAO recommended that the Commandant of the Coast Guard:

Recommendation 1: Update Commandant Instruction M6000.1F "Coast Guard Medical Manual" to classify gambling disorder as an addiction and not as an impulse control issue

Response: Concur. The paragraphs within Commandant Instruction Manual 6000.1F that would classify gambling disorder as an addiction and not as an impulse control issue are in the process of being updated by the Coast Guard Office of Health and Safety (CG-112). Estimated Completion Date: October 31, 2017.

Recommendation 2: Update Commandant Instruction M1000.10, "Coast Guard Drug and Alcohol Abuse Program" to explicitly include gambling disorder.

Response: Concur. USCG agrees that gambling disorders need to be addressed in written policy and procedures. Commandant Instruction Manual 1000.10 is currently under revision and being updated to remove all reference to medical issues and associated terminology, including those related to gambling disorders. Once revised, the manual will strictly focus on administrative separation policy based on misconduct associated with drug and alcohol abuse.

All gambling disorders will be referenced and addressed in Commandant Instruction Manual M6000.1F, "Coast Guard Medical Manual," (see response to Recommendation 1 shown above). Given these actions, we request that GAO consider this recommendation resolved and closed.

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact	Brenda S. Farrell, (202) 512-3604 or farrellb@gao.gov
Staff Acknowledgments	In addition to the contact named above, Kimberly C. Seay (Assistant Director), Mae Jones, Shari Nikoo, Matthew Sakrekoff, Paul Seely, Michael Silver, and Eric Warren made major contributions to this report.

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Strategic Planning and External Liaison	James-Christian Blockwood, Managing Director, spel@gao.gov, (202) 512-4707 U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548

